

**REMARKS****Summary of the Office Action**

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawai et al. (JP 05-325880) (hereinafter "Sawai") in view of Kyushima (U.S. Patent 5,744,908) (hereinafter "Kyushima").

**Summary of the Response to the Office Action**

Applicants have amended claim 1 to differently describe embodiments of the disclosure of the instant application. Accordingly, claims 1 and 2 remain currently pending for consideration.

**Rejections under 35 U.S.C. § 103(a)**

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawai in view of Kyushima. Applicants have amended independent claim 1 to differently describe embodiments of the disclosure of the instant application. To the extent that these rejections might be deemed to apply to the claims as newly-amended, they are respectfully traversed for the following reasons. Applicants note that they are intimately familiar with the applied Sawai and Kyushima patents because they are assigned to the same entity as the instant application.

Independent claim 1 of the instant application, as newly-amended, describes an advantageous combination of features of a light detection tube including: a photoelectric face for generating photoelectrons by the absorption of ultraviolet rays; and a single crystal sapphire plate, on which a photoelectric face for generating photoelectrons by the absorption of ultraviolet rays is formed, as a photoreceiving face plate is attached to a light entering window of a vacuum

vessel. Claim 1 goes on to describe that a peripheral part of the sapphire plate is airtightly thermally crimped to a window peripheral part made of metal or ceramics, surrounding the light entering window via a seal ring made of aluminum. Claim 1 is newly-amended in the instant paper to even further describe that (a) “the peripheral part of the sapphire plate is fitted into the window peripheral part by a spigot,” and (b) “a side surface of the sapphire plate is covered with the window peripheral part.”

Applicants respectfully submit that these features (a) and (b) are supported and described, for example, by the disclosure of Fig. 4 and at page 2, lines 21-25 of the instant application’s specification.

Applicants respectfully submit, in addition to the remarks previously-filed in this application on June 2, 2008, that neither of the cited references disclose these above-described features (a) and (b). Applicants respectfully submit that a lattice defect is likely to occur on the sapphire plate as a result of external stress. Therefore, the manufacturing process of the sapphire plate may result in such a lattice defect being formed on the side surface of the sapphire plate as a result of external stress. In this situation, Applicants respectfully submit that when light enters the side surface of the sapphire plate, phosphorescence or fluorescence may be generated from the sapphire plate.

Applicants respectfully submit that in the present invention, as particularly described in newly-amended independent claim 1, the side surface of the present invention is covered with the window peripheral part. Therefore, Applicants respectfully submit that this novel structure results in a decrease of the above-described phosphorescence or fluorescence generated from the sapphire plate because the light cannot enter the side surface of the sapphire plate in such an arrangement as described in newly-amended independent claim 1.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 103(a) should be withdrawn because Sawai and Kyushima, whether taken separately or combined, do not teach or suggest each feature of claims 1 and 2 of the instant application. As pointed out by MPEP § 2143.03, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.’ In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).”

### **CONCLUSION**

In view of the foregoing amendments and remarks, withdrawal of the rejections and allowance of all pending claims are earnestly solicited. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants’ undersigned representative to expedite prosecution. A favorable action is awaited.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**DRINKER BIDDLE & REATH LLP**

By:



Paul A. Fournier

Reg. No. 41,023

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**Customer No. 055694**

**DRINKER BIDDLE & REATH LLP**

1500 K Street, N.W., Suite 1100

Washington, DC 20005-1209

Tel.: (202) 842-8800; Fax: (202) 842-8465